CLAIMS:

What is claimed is:

- 1 1. A method in a data processing system for making an
- 2 information request, comprising:
- 3 sending a first request for information and a
- 4 credential to a server to establish a session;
- receiving a session identification and the information
- 6 from the server; and
- 7 sending a second request for information and the
- 8 credential and the session identification to the server.
- 1 2. The method of claim, wherein the credential is a user
- 2 name and password, a security token, or a certificate.
- 1 3 .The method of claim 1, wherein the session
- 2 identification is in a session identification data
- 3 structure.
- 1 4. The method of claim 3, wherein the session
- 2 identification data structure is a session identification
- 3 cookie,
- 1 5. The method of claim 4, further comprising storing the
- 2 session identification cookie.

- 1 6. The method of claim 3, wherein the session
- 2 identification data structure is in a rewritten uniform
- 3 resource locator.
- 1 7. The method of claim 1, wherein the request is a
- 2 hypertext transport protocol request.
- 1 8. The method of claim 7, wherein the hypertext transport
- 2 protocol request is a uniform resource locator.
- 1 9. A method in a data processing system for managing an
- 2 information request, comprising:
- 3 establishing a session;
 - generating a session identification in response to the session being established;

sending the session identification to the client;

receiving a request for information and a credential and the session identification from a client;

- 9 determining whether the session identification is
- 10 valid;
- 11 determining whether the credential is valid;
- sending the information to the client in response to
- 13 the session identification and the credential being valid.
- 1 10. The method of claim 9, wherein the credential is a
- 2 user name and password, a security token, or a certificate.

- 1 11. The method of claim 9, further comprising:
- 2 associating a user account with the session
- 3 identification in response to the credential being valid.
- 1 12. The method of claim 9, wherein the step of generating
- 2 a session identification comprises generating a random
- 3 number.
- 1 13. The method of claim 9, wherein the step of generating
- 2 a session identification comprises generating a session
- 3 identification data structure.
- 1 14. The method of claim 13, wherein the session
- 2 identification data structure is a session identification
- 3 cookie.
- 1 15. The method of claim 13, wherein the session
- 2 identification data structure is in a rewritten uniform
- 3 resource locator.
- 1 16. The method of claim 9, wherein the request is a
- 2 hypertext transport protocol request.
- 1 17. The method of claim 16, wherein the hypertext
- 2 transport protocol request is a uniform resource locator.

- 1 18. A method in a data processing system for making an
- 2 information request, comprising:
- 3 sending a request for information and a session
- 4 identification and a credential to a server; and
- 5 receiving the information from the server.
- 1 19. The method of claim 18, wherein credential is a user
- 2 name and password / a security token, or a certificate.
- 1 20. The method of claim 18, wherein the request is a
- 2 hypertext/transport protocol request.
- 1 21. The method of claim 20, wherein the hypertext
- 2 transport protocol request is a uniform resource locator.
- 1 22. A method in a data processing system for managing an
- 2 information request, comprising:
- 3 receiving a request for information and a session
- 4 identification and a first credential from a client;
- 5 determining whether the session identification is
- 6 valid;
- 7 retrieving a session data structure including a second
- 8 credential in response to the session identification being
- 9 valid;

- 10 determining whether the first credential and the
- 11 second credential match; and
- 12 fulfilling the request for information in response to
- 13 the first credential and the second credential matching.
- 1 23. The method of claim 22, wherein the first credential
- 2 is a user name and password, a security token, or a
- 3 certificate.
- 1 24. The method of claim 22, wherein the step of generating
- 2 a session identification comprises generating a random
- 3 number.
- 1 25. The method of claim 22, wherein the step of generating
- 2 a session identification comprises generating a session
- 3 identification data structure.
- 1 26. The method of claim 25, wherein the session
- 2 identification data structure is a session identification
- 3 cookie.
- 1 27. The method of claim 25, wherein the session
- 2 identification data structure is in a rewritten uniform
- 3 resource locator.

- 1 28. The method of claim 22, wherein the request is a
- 2 hypertext transport protocol request.
- 1 29. The method of claim 28, wherein the hypertext
- 2 transport protocol request is a uniform resource locator.
- 1 30. An apparatus for making an information request,
- 2 comprising:
- first sending means for sending a first request for
- 4 information and a credential to a server to establish a
- 5 session;
- 6 receipt means for receiving a session identification
- 7 and the information from the server; and
- 8 second sending means for sending a second request for
- 9 information and the credential and the session
- 10 identification to the server.
- 1 31. The apparatus of claim 30, wherein the credential is a
- 2 user name and password, a security token, or a certificate.
- 1 32. The apparatus of claim 30, wherein the session
- 2 identification is in a session identification data
- 3 structure.

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- 1 33. The apparatus of claim 32, wherein the session
- 2 identification data structure is a session identification
- 3 cookie.
- 1 34. The apparatus of claim 33, further comprising storage
- 2 means for storing the session identification cookie.
- 1 35. The apparatus of clare $\sqrt{32}$, wherein the session
- 2 identification data structure is a rewritten uniform
- 3 resource locator.
- 1 36. The apparatus of claim 30, wherein the request is a
- 2 hypertext/transport protocol request.
- 1 37. The apparatus of claim 36, wherein the hypertext
- 2 transport protocol request is a uniform resource locator.
- l 38. An apparatus for managing an information request,
- 2 comprising:

session means for establishing a session;
generating means for generating a session
identification in response to the session being
established;

- first sending means for sending the session
- 8 identification and to the client;

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- 9 receipt means for receiving a request for information
- 10 and a credential and the session identification from the
- 11 client:
- 12 first determining means for determining whether the
- 13 session identificatin is valid;
- 14 second determining means for determining whether the
- 15 credential is valid; and
- 16 second sending means for sending the information to
- 17 the client in response to the session identification and
- 18 the credential being valid.
- 1 39. The apparatus of claim 38, wherein the credential is a
- 2 user name and password, a security token, or a certificate.
- 1 40. The apparatus of claim 38, further comprising:
- 2 association means for associating a user account with
- 3 the session identification in response to the session
- 4 identification being generated.
- 1 41. The apparatus of claim 38, wherein the generating
- 2 means comprises means for generating a random number.
- 1 42. The apparatus of claim 38, wherein the generating
- 2 means comprises means for generating a session
- 3 identification data structure.

- 1 43. The apparatus of claim 42, wherein the session
- 2 identification data structure is a session identification
- 3 cookie.
- 1 44. The apparatus of claim 42, wherein the session
- 2 identification data structure is in a rewritten uniform
- 3 resource locator.
- 1 45. The apparatus of claim 38, wherein the request is a
- 2 hypertext transport protocol request.
- 1 46. The apparatus of claim 45, wherein the hypertext
- 2 transport protocol request is a uniform resource locator.
- 1 47. An apparatus for making an information request,
- 2 comprising:
- 3 a processor; and
- a memory electrically donnected to the processor, the
- 5 memory having stored therein a program to be executed on
- 6 the processor for performing
- 7 sending a request for information and a session
- 8 identification and a credential to a server; and
- 9 receiving the information from the server.
- 1 48. The apparatus of claim 47, wherein credential is a
- 2 user name and password, a security token, or a certificate.

- 1 49. The apparatus of claim 47, wherein the request is a
- 2 hypertext transport protecol request.
- 1 50. The apparatus of claim 49, wherein the hypertext
- 2 transport protocol request is a uniform resource locator.
- 1 51. An apparatus for managing an information request,
- 2 comprising:
- 3 a processor; and
- 4 a memory electrically connected to the processor, the
- 5 memory having stored therein a program to be executed on
- 6 the processor for performing:
- 7 receiving a request for information and a session
- 8 identification and a first credential from a client;
- 9 determining whether the session identification is
- 10 valid;
- 11 retrieving a session data structure including a second
- 12 credential in response to the session identification being
- 13 valid:
- 14 determining whether the first credential and the
- 15 second credential match; and
- fulfilling the request for information in response to
- 17 the first credential and the second credential matching.

- 1 52. The apparatus of claim 51, wherein the first
- 2 credential is a user name and password, a security token,
- 3 or a certificate.
- 1 53. The apparatus of claim 51, wherein the step of
- 2 generating a session identification comprises generating a
- 3 random number.
- 1 54. The apparatus of claim 51, wherein the step of
- 2 generating a session identification comprises generating a
- 3 session identification data structure.
- 1 55. The apparatus of claim 54, wherein the session
- 2 identification data structure is a session identification
- 3 cookie.
- 1 56. The apparatus of claim 54, wherein the session
- 2 identification data structure is in a rewritten uniform
- 3 resource locator.
- 1 57. The apparatus of claim 51, wherein the request is a
- 2 hypertext transport protocol request.
- 1 58. The apparatus of claim 57, wherein the hypertext
- 2 transport protocol request is a uniform resource locator.

A computer program product, in a computer readable 1 medium, for making an information request, comprising: 2 3 instructions for sending a first request for information and a credential to a server to establish a 4 5 session; instructions for receiving a session identification 6 7 and the information from the server; and instructions for sending a second request for 8 information and the credential and the session 9 identification to the server. 10 A computer program product, in a computer readable 1 medium, for managing an information request, comprising: 3 instructions for establishing a session; instructions for generating a session identification in response to the session being established; 5 instructions for sending the session identification to the client; instructions for receiving a request for information and a credential and the session identification from a 10 client; instructions for determining whether the session 11 12 identification is valid; 13 instructions for determining whether the credential is

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valid;

- instructions for sending the information to the client
- 16 in response to the session identification and the
- 17 credential being valid.
- 1 61. A computer program product, in a computer readable
- 2 medium, for making an information request, comprising:
- instructions for sending a request for information and
- 4 a session identification and a credential to a server; and
- instructions for receiving the information from the
- 6 server.
- 1 62. A computer program product, in a computer readable
- 2 medium, for managing an information request, comprising:
- instructions for receiving a request for information
- 4 and a session identification and a first credential from a
- 5 client;
- 6 instructions for determining whether the session
- 7 identification is valid;
- 8 instructions for retrieving a session data structure
- 9 including a second credential in response to the session
- 10 identification being valid;
- instructions for determining whether the first
- 12 credential and the second credential match; and
- instructions for fulfilling the request for
- 14 information in response to the first credential and the
- 15 second credential matching.

